

A NEW GENUS (KNULLANA) AND TWO NEW SPECIES  
OF LEAFHOPPERS (HOMOPTERA-CICADELLIDAE)  
FROM MEXICO

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In 1900 Dr. Ball described from a single male specimen collected in Mexico a species which he named *Thamnotettix perexigua*. Recent collecting in Mexico and the southwestern United States has brought to the author many specimens of this group which represent three distinct species. Also the present study has indicated that these do not belong to a previously described genus. The genus and two species belonging to it are therefore described and the characters of the males of the three known species are offered for their separation.

Genus **Knnullana** nov.

Related to *Chlorotettix*, *Cyperanus* and *Elymanus*. Male plates with long tapering filamentous apices as in *Osbornellus*. In general form and appearance most closely resembling the larger green species of *Chlorotettix*, with banded markings on the vertex. The vertex is short and broad and bluntly angled with front. The pronotum is broader than the head. The elytra are long and narrow, venation similar to that of *Cyperanus*. Genotype *Thamnotettix perexigua* Ball.

I take pleasure in dedicating this genus to Professor J. N. Knull, who has collected so many interesting Cicadellidae in North America, especially in the southwestern United States.

**Knnullana perexigua** (Ball)

*Thamnotettix perexigua* Ball. Can. Ent. 32: 339, 1900

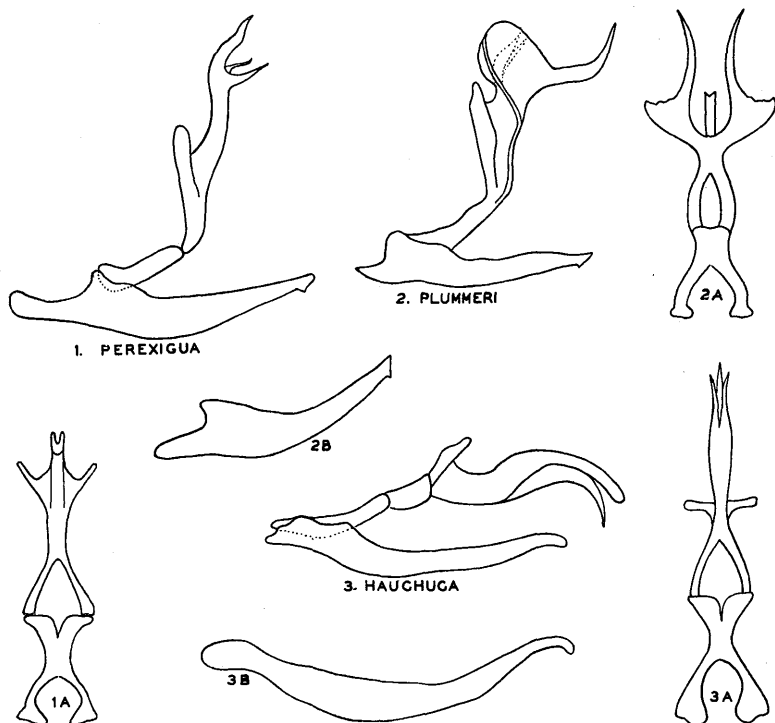
A large yellowish-green species with a black waved line above margin of vertex. Length, 8-8.5 mm.

Vertex broad, slightly longer on middle than next the eyes and more than twice as broad as long.

*Color*.—Yellowish-green, vertex with a black waved line above margin of vertex and a more narrow parallel line just beneath margin, forming a pale marginal band which is the width of the ocelli. Elytra greenish-yellow subhyaline, veins pale, inconspicuous. Face pale fuscous with portions of several arcs.

*Genitalia*.—Female last ventral segment slightly produced with a pair of long slender tapered processes arising on middle half and produced more than the length of the segment. These are separated by a deep

U-shaped notch the width of the ovipositor. Male plates long with tapered attenuate apices. Style long and rather narrow, tapered to form a rather blunt apex which bears a small tooth on inner margin. Aedeagus bifid at base with a short erect produced process at about half its length. Apex terminating in three processes, a central dorsally curved heavier portion and a ventral lateral process on either side.



1. Lateral view of style and aedeagus of *K. perexigua*.  
1a—Ventral view of aedeagus.
2. Lateral view of style and aedeagus of *K. plummeri*.  
2a—Ventral view of aedeagus; 2b—Ventral view of style.
3. Lateral view of style and aedeagus of *K. hauchuca*.  
3a—Ventral view of aedeagus; 3b—Ventral view of style.

This species was described by Ball from a single male specimen from Cuernavaca, Mexico. The allotype female is from Chilpancingo, Mexico, September 10, 1940, collected by the author.

A large series of specimens are at hand including material from Taxco, Chilpancingo, Iguala, Cuernavaca and Jiutepec, Mexico.

***Knullana hauchuca* n. sp.**

Resembling *perexigua* in form and general appearance but smaller and darker in color. Male genitalia distinct. Length, 7–7.5 mm.

Vertex broadly rounded, more than twice as wide between eyes as median length.

*Color*.—Dull sordid green to greenish gray. Vertex with a broad waved black band just above margin and a similar broad waved band just below the margin. The pale marginal band just as wide as included ocelli. A broad tawny blotch just back of upper marginal line and between ocelli. Elytra grayish hyaline, nervures paler.

*Genitalia*.—Female last ventral segment with posterior margin strongly roundedly produced with a pair of long slender parallel processes at middle produced more than one-third the length of the segment, separated approximately the width of the ovipositor by a deep U-shaped notch. Male plates elongate, triangular, with long slender, tapered apices. Styles long, slender with apex curved inwardly. Aedeagus bifid at base with a curved dorsal portion bluntly rounded at apex and a pair of sharply pointed ventral processes which arise at apex.

Holotype male from Ramsey Canyon, Hauchuca Mountains, Arizona, September 17, 1935 (F. H. Parker); allotype female, Mexico City, Mexico, September 1, 1940 (DeLong); paratype male, Mexico City, Mexico, September 1, 1939 (C. C. Plummer). The latter specimens were swept from shrubs at an altitude of 9,000 feet.

***Knollana plummeri* n. sp.**

Resembling *hauchuca* in form and appearance, but with distinct male genitalia. Length, male, 7 mm.; female, 7.5–8 mm.

Vertex broadly rounded, more than twice as wide between eyes as median length.

*Color*.—Dull green washed with yellow. Vertex with a black waved marginal line above and below ocelli. Anterior half of vertex tawny, posterior portion yellowish. Elytra dull greenish, veins yellow.

*Genitalia*.—Female last ventral segment produced, forming a pair of long slender parallel processes at apex which are separated by a U-shaped notch. Male plates long, triangular, with attenuate produced apices. Style elongate with a broad apex pointed on outer margin and with a slight inwardly produced tooth on inner margin. Aedeagus bifid at base with a short central dorsal process and a pair of broad plates from which arise on each side a long heavy spine which is curved upward at about half its length and tapered to a sharp point at apex.

Holotype male, allotype female and male and female paratypes collected at Cuernavaca (Morelos), Mexico, September 8, 1939, by C. C. Plummer and the author. These were swept from shrubs at the margin of pasture land. I take pleasure in dedicating this species to Dr. Plummer whose collecting in Mexico has revealed many interesting species of Homoptera.